

*IN THE UNITED STATES PATENT AND TRADEMARK OFFICE*

**Application No.** : 09/719,389  
**Applicant** : David Holliday et al.  
**Filed** : 06-25-2001  
**TC/A.U.** : 2424  
**Examiner** : Farzana E. Hossain  
**Docket No.** : 2365-105  
**Customer No.** : 6449  
**Confirmation No.** : 8225

**APPELLANTS' REPLY BRIEF UNDER 37 C.F.R. § 41.41**

**MAIL STOP – Appeal Brief – Patents**

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This Reply Brief is in response to the Examiner's Answer which was mailed on December 17, 2009 and is timely filed on February 17, 2010, within two months of the date of the Answer. See 37 C.F.R. § 41.41(a)(1).

**REJECTIONS WITHDRAWN**

Appellants acknowledge that the rejection of claims 1-3, 5-8, 22, 38 and 39 as unpatentable under 35 U.S.C. § 103(a) over Ellis et al. (U.S. 5,548,338) in view of Yuen et al. (U.S. 6,028,599) and the rejection of claims 4 and 23- 25 are unpatentable under 35 U.S.C. § 103(a) over Ellis '338 in view of Yuen '599 and further in view of Terasawa et al. (U.S. 6,147,714) have been withdrawn by the Examiner, and thus, Appellants withdraw their appeal of those rejections.

**NEW GROUNDS FOR REJECTIONS**

In response to the new grounds for rejection, Appellants elect to maintain the appeal as permitted under 37 C.F.R. § 41.39(b)(2).

Claim 14 is rejected under 35 USC § 112, first paragraph, on the ground that it is a single means claim. Appellants respectfully traverse the rejection. Independent claim 14 recites "means for sorting the scheduling data depending on the sorting data to produce output

signals defining an image of selected events in the program schedule for display as a sorted schedule on a television screen in an order depending on the sorted list.” (emphasis added) Claim 14 effectively recites two means-plus-function limitations: means for sorting and means for producing output signals. It is suggested in the answer that, as a single means claim, claim 14 covers every conceivable means for achieving the stated purpose. Appellants respectfully submit that such reasoning is contrary to the express wording of 35 USC § 112 (¶ 6), which states “an element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” Thus, by statute, claim 14 can be construed to cover only the structure, material, or acts described in the specification for performing the recited function. As explained in Appellants’ Appeal Brief, the structure corresponding to the “means for sorting” includes the processor (23) executing software configured to compute index lists of events sorted by sorting data, such as time or alphabetically, at the head end, and to transmit the sorted index lists (page 20, lines 13-14).

Thus, claim 14 effectively recites two means clauses: means for sorting and means for producing output signals. The corresponding structure described in the specification includes software configured to (1) compute index lists of events by sorting data, and (2) transmit the sorted lists. Thus, claim 14 is not a single means claim which covers every conceivable means for achieving the stated purpose.

For the forgoing reasons, Appellants respectfully request that the rejection of claim 14 be reversed.

#### **COMMENTS ON RESPONSE TO ARGUMENTS**

##### **A. Claims 9-13 and 26-36 are not anticipated by Ellis et al. (U.S. 5,760,821).**

The Examiner continues to rejected claims 9-13 and 26-36 under 35 U.S.C. § 102(e), as being anticipated by Ellis et al. (U.S. 5,760,821). (Answer, pp. 4-7). As explained in Appellants’ Appeal Brief, Ellis ‘821 does not disclose:

means for comparing the channel identity and channel subset identity for a channel in a received signal with the reference channel and channel subset identities and means for outputting the received television signal for display of the programme or other services defined thereby depending on the comparison

Ellis '821 (referred to as "Ellis" in the Answer) is entirely concerned with the filtering of EPG schedule data so that only the schedule information corresponding to the user's service environment is stored (see abstract). The reason for filtering the schedule data is that, in the context of cable TV broadcast, the channels available vary between regions (See col. 1, lines 41-47). Thus, Ellis discloses an information localization filter (53) which uses group numbers as filtering criteria to transform a national program schedule (10) into a localized version (55), which is then stored in the set-top box. (See Ellis '821, Fig. 2; col. 3, lines 30-35; col. 4, lines 3-5).

In contrast to the teachings of Ellis '821, claim 9 relates to outputting a received TV signal for display of the programme or other services defined by the signal depending on a comparison between channel identities and subset identities for the channel and for the receiver. Claim 9 has nothing to do with the selection of EPG schedule data. Ellis does not teach anything about selection of available channels, it being assumed that a receiver will be permitted to receive all available channels within a region. Bennington does not add anything relevant to the teaching of Ellis.

The Examiner contends that Ellis '821 discloses the "means for outputting" in Figure 2, column 1, lines 13-20, 61-67, and column 2, lines 1-4, 49-57. The Examiner also cites to Bennington (U.S. Patent No. 6,418,556, incorporated by reference in Ellis '821) at Figure 18, the Abstract, and column 4, lines 15-28. (See Answer, p. 14). The cited portions of Ellis '821 merely describe a television, a set-top box, and a microprocessor and the provision of schedule information: "[t]he result is an electronic program schedule that is tailored to the viewer's specific service environment without the use of costly equipment on the transmission side of the program schedule feed." (Ellis '821, col. 2., lines 1-4, emphasis added). The cited portions Bennington '556 merely describe an electronic program schedule system that includes a data processor that receives and stores television program schedule information, a user-operable

remote controller for controlling the data processor, a television receiver for displaying television programs and schedule information, and a video display generator configured to display a portion of the program schedule information in overlaying relationship with the television program appearing on a television channel. (See Bennington '556, col. 4, lines 15-41). Bennington '556 does not disclose means for outputting a received TV signal for display of the programme or other services defined by the signal depending on a comparison between channel identities and subset identities for the channel and for the receiver

Thus, Ellis '821 (including Bennington '556) does not disclose any elements or components which perform the recited functions of "comparing the channel identity and channel subset identity for a channel in a received signal with the reference channel and channel subset identities" and "outputting the received television signal for display of the programme or other services defined thereby depending on the comparison." Accordingly, Ellis '821 and Bennington '556 do not disclose the recited functions corresponding to the "means for comparing" and the "means for outputting" limitations.

Claims 10-13 and 26-36 depend directly or indirectly from claim 9 and thus incorporate all limitations of claim 9.

For the above reasons, as well as the reasons outlined in Appellants' Appeal Brief, Appellants submit that the subject matter of claims 9-13 and 26-36 is not anticipated by Ellis et al. '821 (and/or Bennington '556). Reversal of this rejection is respectfully requested.

**B. Claims 14, 15, and 40 are not anticipated by Ellis (U.S. 2007/0271582) ("Ellis 2").**

The Examiner continues to reject claims 14, 15, and 40 under 35 U.S.C. § 102(e) as being anticipated by Ellis (U.S. 2007/0271582) ("Ellis 2") (Answer, pp. 7-8). As explained in Appellants' Appeal Brief, claim 14 requires that the receiver receive "signals [including] sorting data defining a sorted list," and then display a programme schedule in an order depending on the sorted list. The structure corresponding to the "means for sorting" includes the processor (23) executing software configured to compute index lists of events sorted by sorting data, such as time or alphabetically, at the head end and to transmit the sorted index lists

(page 20, lines 13-14). Ellis 2 does not anticipate claim 14 because it does not disclose the structure corresponding to the “means for sorting.” See 35 U.S.C. §112(6); In re Donaldson, 16 F.3d 1189, 1195; 29 USPQ2d 1845 (Fed. Cir. 1994).

Furthermore, Ellis 2 does not anticipate claim 14 because it does not disclose components that perform the functions recited in claim 14. In particular, Ellis 2 does not disclose components that “[sort] the scheduling data depending on the sorting data to produce output signals defining an image of selected events in the programme schedule for display as a sorted schedule on a television screen in an order depending on the sorted list.” Thus, Ellis 2 does not disclose the recited function corresponding to the “means for sorting” limitation.

Ellis 2 describes that the program listings may be sorted according to a user-defined priority or sort order for programs satisfying the preference criteria in the user’s profile. See, e.g., Paragraphs 75 and 76 of Ellis 2, quoted in Appellant’s Appeal Brief. There is no disclosure in Ellis 2 of *receiving* a sorted list, nor is there disclosure of a processor executing software configured to compute index lists of events sorted by sorting data at the head end and to transmit the sorted index lists.

In the Response to Arguments, the Examiner continues to assert that “Claim 14 does not disclose sending the sorted list over the air” (Answer, p. 15). But, as explained in Appellants’ Appeal Brief, claim 14 does recite: “...receiving television signals in a plurality of channels...” and “...the signals include sorting data defining a sorted list...” The Examiner acknowledges that claim 14 includes this language but contends that “[i]t is necessarily included that the word ‘define’ can include the meaning of explaining, identifying or specifying essential qualities or describe.” (Id.) Appellants acknowledge that a definition of the term “define” that is applicable to the claimed invention is “to explain or identify the nature or essential qualities of; describe.” (<http://dictionary.reference.com/browse/defining>). This definition, however, supports Appellants’ argument that claim 14 requires that the sorted list be included in the television signals received by the receiver. The concept of transmitting a sorted list is described in the specification as follows:

Index lists of sorted events by time or alphabetically are computed in the head end, sent over the air as part of the XSI and cached in the decoder 3. This saves computer power in the decoder because sorting listings can be a very CPU

intensive job. The sorted indices also convey information such as genre/sub-genre, PPV post-buying window and other marketing-oriented flags (PPV, Critic's Choice, New Show, Event) that are used for filtering purposes and to support the Box Office functionality.

(p. 20, lines 12-18).

Thus, in the context of the disclosure, and applying the definition of the term "define" stated above, claim 14 recites "...the signals include sorting data [explaining or identifying the nature or essential qualities of] a sorted list..." Thus, it is clear that claim 14 requires that the sorted list is included in the television signals received by the receiver. As Ellis 2 does not describe a receiver configured to receive signals, "wherein the signals include sorting data defining a sorted list and scheduling data defining a schedule of programme events," and to "[sort] the scheduling data depending on the sorting data ..." Ellis 2 does not anticipate the subject matter of claim 14. Paragraphs 53 and 48 of Ellis 2 quoted in the Answer (Answer at pp. 15, 16) do not teach or suggest providing a schedule for display as a sorted schedule based on sorting data defining a sorted list within the received signals.

Claims 15 and 40 depend directly or indirectly from claim 14 and thus incorporate all limitations of claim 14.

For the above reasons, as well as the reasons outlined in Appellants' Appeal Brief, Appellants submit that the subject matter of claims 14, 15, and 40 is not anticipated by Ellis 2. Reversal of this rejection is respectfully requested.

**C. Claims 16-18 and 37 are not obvious over Usui et al. (U.S. 5,808,694) in view of Yuen (WO 97/47136), Eyer '545, and Eyer et al. (U.S. 5,801,753).**

The Examiner continues to reject claims 16-18 and 37 under 35 U.S.C. § 103(a), as being obvious over Usui et al. (U.S. 5,808,694) in view of Yuen (WO 97/47136) ("Yuen 2"), Eyer et al. '545, and Eyer et al. (U.S. 5,801,753). (Answer, pp. 8-13).

As explained in Appellant's Appeal Brief, Usui '694, Yuen 2, Eyer '545, and Eyer '753 do not render claim 16 obvious because they disclose neither the function nor the structure corresponding to the "means for receiving and decoding additional programme schedule data

from the first network for either of the first or second broadcast network, in response to a user request.”

More specifically, neither Eyer ‘545 nor Usui ‘694 teaches a system that receives and caches program schedule data over first and second networks, the program schedule data for the first network being broadcast at a faster rate than the program schedule data for the second network, and further including an “on-demand” mode enabled by means for receiving and decoding additional program schedule data from the first network for either the first or second network in response to a user request – as described in the specification at p. 22, line 21 through p. 23, line 10.

In the Response to Argument, the Examiner cites to various portions of Usui ‘694, Yuen 2, Eyer ‘545, and Eyer ‘753 as disclosing elements of independent claim 16.

The Examiner cites to Figure 23 of Usui ‘694 merely for its disclosure that schedule data for first and second networks may be received from their respective networks and combined at the receiver. (Answer, p. 17)

The Examiner contends Eyer ‘545 (referred to as “Eyer” in the Answer) discloses “additional program schedule data from the first network for either the first or second broadcast network” at Column 13, lines 58-67, Column 5, lines 62-67, Column 8, lines 35-50, Column 15, lines 32-37 (Answer, p. 17). But, Eyer ‘545 merely discloses that EPG data for both satellite and CATV networks is broadcast over the satellite network only. Thus, Eyer ‘545 does not disclose the feature of claim 16 that the first and second networks each carry schedule data for their respective networks. The Examiner identifies the passage at col. 9, lines 56-67 as disclosing the “user request” of claim 16, but that passage is concerned with the selection of schedule data for display, such as scheduling information for a future time period or detailed information regarding a particular program. Eyer ‘545 does not describe, in a receiver configured to receive signals in a first broadcast network including program schedule data for the first network and signals in a second broadcast network including program schedule data for the second network, “means for receiving and decoding additional programme schedule data from the first network for either of the first or second broadcast network, in response to a user request.”

Yuen 2 is cited for its alleged disclosure that a user can receive program schedule data over a satellite network or a cable network and “program schedule data broadcast over the first network at high speed in real time for 150 channels versus preloading the program schedule data over night into RAM or in the second network for 10-20 channels for cable or OTA channels.” (Answer, p. 18). But, as explained in Appellant’s Appeal Brief, Yuen 2 actually teaches away from combining EPG data from two different networks on the same network:

To send program information for all these 1700 stations over the data channel currently used for guide information on DBS systems will involve more than 10 times the data required for DBS channels, which, in a loop, would require tens of seconds, which consumers would find unacceptable.

(Yuen 2, page 1, line 36 to page 2, line 4). Instead, Yuen 2 discloses various techniques for receiving schedule data for a network from the respective network, and combining the schedule data at the receiver (see e.g. claim 11). For example, data may be sent by satellite over night, or it may be sent over the air (“OTA”). Thus, the disclosure of Yuen 2 contradicts Eyer.

Eyer ‘753 (referred to in the Answer as “Eyer2”) is cited for its disclosure of trickle data transmitted at lower rate (Answer at 18), but Eyer ‘753 has no disclosure to overcome the shortcomings of Eyer ‘545 and Usui ‘694 with respect to the “means for receiving and decoding additional program data ....”

In summary, Usui ‘694 and Yuen 2 disclose combining EPG data for first and second networks from the respective networks. Eyer ‘545 and Eyer ‘753 disclose obtaining EPG for first and second networks only from one of the networks. No combination of these references would achieve a system where programme schedule data for first and second networks is normally received from the respective networks, but additional schedule data is received from the first network for either of the first and second networks in response to a user request. Thus, the cited references do not teach or suggest all element of independent claim 16.

Furthermore, even assuming, *arguendo*, that the cited references do disclose all the elements of independent claim 16, the Examiner has articulated no reason why a person of ordinary skill in the art would have modified and/or combined the teachings of the cited references to derive the claimed invention. To make a prima facie case of obviousness, an examiner must show that the claimed invention, *as a whole*, would have been obvious at the



time of filing. See MPEP §2141.02. “[R]ejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006) see also KSR v. Teleflex, Inc., 550 U.S. 398, 418 (2007) (quoting Federal Circuit statement with approval). No such “articulated reasoning with [a] rational underpinning” is provided for combining the diverse disclosures of Usui ‘694, Yuen 2, Eyer ‘545, and Eyer ‘753.

Claims 17, 18, and 37 depend from claim 16 and therefore incorporate all limitations of claim 16.

Accordingly, for the above reasons, as well as the reasons provided in Appellants’ Appeal Brief, Appellants submit that claims 16-18 and 37 are not rendered obvious by Usui ‘694 in view of Yuen 2, Eyer ‘545, and Eyer ‘753. Reversal of this rejection is respectfully requested.

**CONTINGENT AUTHORIZATION TO CHARGE DEPOSIT ACCOUNT**

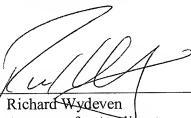
Although no fees are believed due, if any fee is due, please charge said fee to Deposit Account No. 02-2135.

Respectfully submitted,

Date:

2/17/10

By



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